

## Crossover Criticality in Ionic Solutions

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To examine the nature of criticality in ionic fluids we have analyzed experimental liquid-liquid coexistence and susceptibility data for various ionic solutions. We show that ionic fluids generally exhibit crossover from Ising behavior asymptotically close to the critical point to mean-field behavior upon increasing the distance from the critical point. This crossover is governed by two physical parameters: a rescaled coupling constant which reflects the strength and range of intermolecular interactions and a "cutoff" length which in a complex fluid appears to be related to a supramolecular structure. Coupling between long-range critical fluctuations and supramolecular ordering may result in the emergence of a multicritical point at which the cutoff length diverges and at which mean-field-like critical behavior is observed. An analogy between crossover critical phenomena in ionic fluids and in polymer solutions is discussed.

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